

SEQUENCE LISTING

<110> Kenneth W. Dobie

<120> ANTISENSE MODULATION OF BETA-SITE APP-CLEAVING ENZYME 2 EXPRESSION

<130> RTS-0378

<160> 158

<210> 1

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 1

tccgtcatcg ctccctcaggg

20

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 2

gtgcgcgcga gcccgaaatc

20

<210> 3

<211> 20

&lt;212&gt; DNA

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;223&gt; Antisense Oligonucleotide

&lt;400&gt; 3

atgcattctg cccccaagga

20

&lt;210&gt; 4

&lt;211&gt; 2990

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (464) ... (2020)

&lt;400&gt; 4

cgctggggcg ctttccgagg aaattcggga ctcgagtttc ccggggaaga ggcgcggcct 60

gagccccggcg aggggtgggga gggcaggcgc aggtggaccc cggcgcccc cagagccccgc 120

tgtgaccttg gccgcggggg aggggctggg ccgctgcggg gcagtcgcgg ccgccagagg 180

gggcagcgga gaagaacttg cccaacttgg cggcgcgggc tggggcggtt ctgcgcctcc 240

gcgcccgcct ccccggcctc cgccttctcc cctcccgcga gcctcctccc ctcccgcgag 300

cctctctccc tgggacctcc tccggtctcc cccgcgcggc ccggtcccgg tgcgcgcccc 360

tccctgcccg cagccccgcg cgcgggccga gtcgctgagc cgcggctgcc ggacgggacg 420

ggaccggcta ggctggggcg gcccccggg ccccgccgtg ggc atg ggc gca ctg 475

Met Gly Ala Leu

1

gcc cgg gcg ctg ctg ctg cct ctg ctg gcc cag tgg ctc ctg cgc gcc	523
Ala Arg Ala Leu Leu Leu Pro Leu Leu Ala Gln Trp Leu Leu Arg Ala	
5 10 15 20	
gcc ccg gag ctg gcc ccc gcg ccc ttc acg ctg ccc ctc cgg gtg gcc	571
Ala Pro Glu Leu Ala Pro Ala Pro Phe Thr Leu Pro Leu Arg Val Ala	
25 30 35	
gcg gcc acg aac cgc gta gtt gcg ccc acc ccg gga ccc ggg acc cct	619
Ala Ala Thr Asn Arg Val Val Ala Pro Thr Pro Gly Pro Gly Thr Pro	
40 45 50	
gcc gag cgc cac gcc gac ggc ttg gcg ctc gcc ctg gag cct gcc ctg	667
Ala Glu Arg His Ala Asp Gly Leu Ala Leu Ala Leu Glu Pro Ala Leu	
55 60 65	
gcg tcc ccc gcg ggc gcc gcc aac ttc ttg gcc atg gta gac aac ctg	715
Ala Ser Pro Ala Gly Ala Ala Asn Phe Leu Ala Met Val Asp Asn Leu	
70 75 80	
cag ggg gac tct ggc cgc ggc tac tac ctg gag atg ctg atc ggg acc	763
Gln Gly Asp Ser Gly Arg Gly Tyr Tyr Leu Glu Met Leu Ile Gly Thr	
85 90 95 100	
ccc ccg cag aag cta cag att ctc gtt gac act gga agc agt aac ttt	811
Pro Pro Gln Lys Leu Gln Ile Leu Val Asp Thr Gly Ser Ser Asn Phe	
105 110 115	
gcc gtg gca gga acc ccg cac tcc tac ata gac acg tac ttt gac aca	859
Ala Val Ala Gly Thr Pro His Ser Tyr Ile Asp Thr Tyr Phe Asp Thr	
120 125 130	
gag agg tct agc aca tac cgc tcc aag ggc ttt gac gtc aca gtg aag	907
Glu Arg Ser Ser Thr Tyr Arg Ser Lys Gly Phe Asp Val Thr Val Lys	
135 140 145	
tac aca caa gga agc tgg acg ggc ttc gtt ggg gaa gac ctc gtc acc	955

Tyr Thr Gln Gly Ser Trp Thr Gly Phe Val Gly Glu Asp Leu Val Thr	
150 155 160	
atc ccc aaa ggc ttc aat act tct ttt ctt gtc aac att gcc act att	1003
Ile Pro Lys Gly Phe Asn Thr Ser Phe Leu Val Asn Ile Ala Thr Ile	
165 170 175 180	
ttt gaa tca gag aat ttc ttt ttg cct ggg att aaa tgg aat gga ata	1051
Phe Glu Ser Glu Asn Phe Phe Leu Pro Gly Ile Lys Trp Asn Gly Ile	
185 190 195	
ctt ggc cta gct tat gcc aca ctt gcc aag cca tca agt tct ctg gag	1099
Leu Gly Leu Ala Tyr Ala Thr Leu Ala Lys Pro Ser Ser Ser Leu Glu	
200 205 210	
acc ttc ttc gac tcc ctg gtg aca caa gca aac atc ccc aac gtt ttc	1147
Thr Phe Phe Asp Ser Leu Val Thr Gln Ala Asn Ile Pro Asn Val Phe	
215 220 225	
tcc atg cag atg tgt gga gcc ggc ttg ccc gtt gct gga tct ggg acc	1195
Ser Met Gln Met Cys Gly Ala Gly Leu Pro Val Ala Gly Ser Gly Thr	
230 235 240	
aac gga ggt agt ctt gtc ttg ggt gga att gaa cca agt ttg tat aaa	1243
Asn Gly Gly Ser Leu Val Leu Gly Gly Ile Glu Pro Ser Leu Tyr Lys	
245 250 255 260	
gga gac atc tgg tat acc cct att aag gaa gag tgg tac tac cag ata	1291
Gly Asp Ile Trp Tyr Thr Pro Ile Lys Glu Glu Trp Tyr Tyr Gln Ile	
265 270 275	
gaa att ctg aaa ttg gaa att gga ggc caa agc ctt aat ctg gac tgc	1339
Glu Ile Leu Lys Leu Glu Ile Gly Gly Gln Ser Leu Asn Leu Asp Cys	
280 285 290	
aga gag tat aac gca gac aag gcc atc gtg gac agt ggc acc acg ctg	1387
Arg Glu Tyr Asn Ala Asp Lys Ala Ile Val Asp Ser Gly Thr Thr Leu	
295 300 305	

ctg cgc ctg ccc cag aag gtg ttt gat gcg gtg gtg gaa gct gtg gcc	1435
Leu Arg Leu Pro Gln Lys Val Phe Asp Ala Val Val Glu Ala Val Ala	
310 315 320	
cgc gca tct ctg att cca gaa ttc tct gat ggt ttc tgg act ggg tcc	1483
Arg Ala Ser Leu Ile Pro Glu Phe Ser Asp Gly Phe Trp Thr Gly Ser	
325 330 335 340	
cag ctg gcg tgc tgg acg aat tcg gaa aca cct tgg tct tac ttc cct	1531
Gln Leu Ala Cys Trp Thr Asn Ser Glu Thr Pro Trp Ser Tyr Phe Pro	
345 350 355	
aaa atc tcc atc tac ctg aga gac gag aac tcc agc agg tca ttc cgt	1579
Lys Ile Ser Ile Tyr Leu Arg Asp Glu Asn Ser Ser Arg Ser Phe Arg	
360 365 370	
atc aca atc ctg cct cag ctt tac att cag ccc atg atg ggg gcc ggc	1627
Ile Thr Ile Leu Pro Gln Leu Tyr Ile Gln Pro Met Met Gly Ala Gly	
375 380 385	
ctg aat tat gaa tgt tac cga ttc ggc att tcc cca tcc aca aat gcg	1675
Leu Asn Tyr Glu Cys Tyr Arg Phe Gly Ile Ser Pro Ser Thr Asn Ala	
390 395 400	
ctg gtg atc ggt gcc acg gtg atg gag ggc ttc tac gtc atc ttc gac	1723
Leu Val Ile Gly Ala Thr Val Met Glu Gly Phe Tyr Val Ile Phe Asp	
405 410 415 420	
aga gcc cag aag agg gtg ggc ttc gca gcg agc ccc tgt gca gaa att	1771
Arg Ala Gln Lys Arg Val Gly Phe Ala Ala Ser Pro Cys Ala Glu Ile	
425 430 435	
gcg ggt gct gca gtg tct gaa att tcc ggg cct ttc tca aca gag gat	1819
Ala Gly Ala Ala Val Ser Glu Ile Ser Gly Pro Phe Ser Thr Glu Asp	
440 445 450	
gta gcc agc aac tgt gtc ccc gct cag tct ttg agc gag ccc att ttg	1867
Val Ala Ser Asn Cys Val Pro Ala Gln Ser Leu Ser Glu Pro Ile Leu	
455 460 465	

tgg att gtg tcc tat gcg ctc atg agc gtc tgt gga gcc atc ctc ctt 1915  
 Trp Ile Val Ser Tyr Ala Leu Met Ser Val Cys Gly Ala Ile Leu Leu  
 470 475 480

gtc tta atc gtc ctg ctg ctg ctg ccg ttc cgg tgt cag cgt cgc ccc 1963  
 Val Leu Ile Val Leu Leu Leu Leu Pro Phe Arg Cys Gln Arg Arg Pro  
 485 490 495 500

cgt gac cct gag gtc gtc aat gat gag tcc tct ctg gtc aga cat cgc 2011  
 Arg Asp Pro Glu Val Val Asn Asp Glu Ser Ser Leu Val Arg His Arg  
 505 510 515

tgg aaa tga atagccaggc ctgacctcaa gcaaccatga actcagctat taagaaaatc 2070  
 Trp Lys

acattttccag ggcagcagcc gggatcgatg gtggcgcttt ctctgtgcc caccgctctt 2130

caatctctgt tctgctccca gatgccttct agattcactg tcttttgatt cttgattttc 2190

aagctttcaa atcctcccta ctccaagaa aaataattaa aaaaaaaact tcattctaaa 2250

ccaaaacaga gtggattggg ctgcaggctc tatgggggtc gttatgccaa agtgtctaca 2310

tgtgccacca acataaaaca aaaccaagcc ttggctcggt ctcttctctc ttcaatctct 2370

ggaaaaataa gtacatatag ttgataacct ctcttagctt acaggaagct ttttgtatta 2430

attgcctttg aggttatctt ccgccagacc tcaacctggg tcaaagtggg acaggaaggc 2490

ttgcagtatg atggcaggag aatcagcctg gggcctgggg atgtaaccaa gctgtaccct 2550

tgagacctgg aaccagagcc acaggcccct tttgtgggtt tctctgtgct ctgaatggga 2610

gccagaattc actaggaggt catcaaccga tggctctcac aagcctcttc tgaagatgga 2670

aggccttttg cccgttgagg tagaggggaa ggaaatctcc tcttttgtac ccaatactta 2730

tggtgtattg ttggtgcgaa agtaaaaaca ctacctcttt tgagactttg cccaggggtcc 2790

tgtgacctgga tgggggtgca ggcagccttg accacggctg ttccctcac ccaaagaat 2850

tatcatccca acagccaaga cccaacaggt gctgaactgt gcatcaacca ggaagagttc 2910

tatccccaag ctggccacta tcacatatgc ttactcttgc ttaaaattaa taaatcatgt 2970

tttgatgaga aaaaactatt 2990

<210> 5

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 5

ggaatggaat acttggccta gct 23

<210> 6

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 6

caccagggag tcgaagaagg t 21

<210> 7

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Probe

<400> 7

cacttgccaa gccatcaagt tctc

24

<210> 8

<211> 19

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 8

gaagggtgaag gtcggagtc

19

<210> 9

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Primer

<400> 9

gaagatggtg atgggatttc

20

<210> 10

<211> 20



<212> DNA

<213> Artificial Sequence

<220>

<223> PCR Probe

<400> 10

caagcttccc gttctcagcc

20

<210> 11

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 11

gcccgggcca gtgcgccat

20

<210> 12

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 12

tgggccagca gaggcagcag

20

<210> 13

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 13

gtccccctgc aggttgtcta

20

<210> 14

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 14

tagccgcggc cagagtcgcc

20

<210> 15

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 15

tagtagccgc ggccagagtc

20

<210> 16

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 16

aggtagtagc cgcgccaga

20

<210> 17

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 17

tccaggtagt agccgcggcc

20

<210> 18

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 18

atctccaggt agtagccgcg

20

<210> 19

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 19

agcatctcca ggtagtagcc

20

<210> 20

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 20

atcagcatct ccaggtagta

20

<210> 21

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 21

gtgtcaacga gaatctgtag

20

<210> 22

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 22

aagttactgc ttccagtgtc

20

<210> 23

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 23

tgtgtcaaag tacgtgtcta

20

<210> 24

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 24

agcggatatgt gctagacctc

20

<210> 25

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 25

ccttggagcg gtatgtgcta

20

<210> 26

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 26

cttccttgtg tgtacttcac

20

<210> 27

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 27

agcccgtcca gcttccttgt

20

<210> 28

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 28

ccaacgaagc ccgtccagct

20

<210> 29

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 29

gtcttcccca acgaagcccg

20

<210> 30

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 30

acgaggtctt cccaacgaa

20

<210> 31

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 31

agtggcaatg ttgacaagaa

20

<210> 32

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 32

aaatagtggc aatgttgaca

20

<210> 33

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 33

ccaggcaaaa agaaattctc

20

<210> 34

<211> 20



<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 34

tggcataagc taggccaagt

20

<210> 35

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 35

gcttggcaag tgtggcataa

20

<210> 36

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 36

cttgatggct tggcaagtgt

20

<210> 37

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 37

cagagaactt gatggcttgg

20

<210> 38

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 38

cgaagaaggt ctccagagaa

20

<210> 39

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 39

agggagtcga agaaggtctc

20

<210> 40

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 40

tcaccagggga gtcgaagaag

20

<210> 41

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 41

gcttgtgtca ccaggagtc

20

<210> 42

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 42

caacgggcaa gccggctcca

20

<210> 43

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 43

cccagatcca gcaacgggca

20

<210> 44

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 44

ttggtcccag atccagcaac

20

<210> 45

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 45

acaagactac ctccgttggt

20

<210> 46

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 46

ccaccaaga caagactacc

20

<210> 47

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 47

tacaaacttg gttcaattcc

20

<210> 48

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 48

ttatacaaac ttggttcaat

20

<210> 49

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 49

cctttataca aacttggttc

20

<210> 50

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 50

tcttcctttat acaaacttgg

20

<210> 51

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 51

tagtaccact cttccttaat

20

<210> 52

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 52

cagaatttct atctggtagt

20

<210> 53

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 53

aatttccaat ttcagaattt

20

<210> 54

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 54

gcctccaatt tccaatttca

20

<210> 55

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 55

ttaaggcttt ggcctccaat

20

<210> 56

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 56

ttatactctc tgcagtccag

20

<210> 57

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 57

gcgttatact ctctgcagtc

20

<210> 58

<211> 20



<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 58

tctgcttat actctctgca

20

<210> 59

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 59

cttgctgcg ttatactctc

20

<210> 60

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 60

ggccttgct gcgttatact

20

<210> 61

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 61

agcgtggtgc cactgtccac

20

<210> 62

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 62

cgcagcagcg tgggtgccact

20

<210> 63

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 63

ttccaccacc gcatcaaaca

20

<210> 64

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 64

gagaattctg gaatcagaga

20

<210> 65

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 65

aaaccatcag agaattctgg

20

<210> 66

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 66

cagtcagaa accatcagag

20

<210> 67

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 67

ttcgtccagc acgccagctg

20

<210> 68

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 68

agaccaaggt gtttccgaat

20

<210> 69

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 69

tggagttctc gtctctcagg

20

<210> 70

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 70

gaggcaggat tgtgatacgg

20

<210> 71

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 71

cccatcatgg gctgaatgta

20

<210> 72

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 72

tcaggccggc ccccatcatg

20

<210> 73

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 73

atcaccagcg catttgtgga

20

<210> 74

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 74

gatgacgtag aagccctcca

20

<210> 75

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 75

gcacccgcaa tttctgcaca

20

<210> 76

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 76

gacactgcag caccgcgaat

20

<210> 77

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 77

tttcagacac tgcagcacc

20

<210> 78

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 78

cggaaatttc agacactgca

20

<210> 79

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 79

agaaaggccc ggaaatttca

20

<210> 80

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 80

gctacatcct ctgttgagaa

20

<210> 81

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 81

cagttgctgg ctacatcctc

20

<210> 82

<211> 20



<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 82

gcataggaca caatccacaa

20

<210> 83

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 83

gctcatgagc gcataggaca

20

<210> 84

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 84

aagacaagga ggatggctcc

20

<210> 85

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 85

gcagcaggac gattaagaca

20

<210> 86

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 86

tgacgacctc agggtcacgg

20

<210> 87

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 87

accagagagg actcatcatt

20

<210> 88

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Antisense Oligonucleotide

<400> 88

catttcacgc gatgtctgac

20

<210> 89

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 89

ctgctgcctc tgctggccca

20

<210> 90

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 90

tagacaacct gcagggggac

20

<210> 91

<211> 20

<212> DNA

<213> H. sapiens

<220>

&lt;400&gt; 91

ggggactctg gccgcggcta

20

&lt;210&gt; 92

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 92

gactctggcc gcggctacta

20

&lt;210&gt; 93

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 93

tctggccgcg gctactacct

20

&lt;210&gt; 94

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 94

ggccgcggct actacctgga

20

&lt;210&gt; 95

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 95

cgcggtact acctggagat

20

<210> 96

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 96

ggctactacc tggagatgct

20

<210> 97

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 97

tactacctgg agatgctgat

20

<210> 98

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 98

ctacagattc tcgttgacac

20

<210> 99

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 99

gacactggaa gcagtaactt

20

<210> 100

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 100

tagacacgta ctttgacaca

20

<210> 101

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 101

gaggtctagc acataccgct

20

<210> 102

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 102

tagcacatac cgctccaagg

20

<210> 103

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 103

gtgaagtaca cacaaggaag

20

<210> 104

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 104

acaaggaagc tggacgggct

20

<210> 105

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 105

agctggacgg gcttcgttgg

20

<210> 106

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 106

cgggcttcgt tggggaagac

20

<210> 107

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 107

ttcgttgggg aagacctcgt

20

<210> 108

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 108

ttcttgtaaa cattgccact

20

<210> 109

<211> 20

<212> DNA



<213> H. sapiens

<220>

<400> 109

tgtcaacatt gccactattt

20

<210> 110

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 110

gagaatttct ttttgcctgg

20

<210> 111

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 111

acttggccta gcttatgcca

20

<210> 112

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 112

acacttgcca agccatcaag

20

<210> 113

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 113

ccaagccatc aagttctctg

20

<210> 114

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 114

ttctctggag accttcttcg

20

<210> 115

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 115

gagaccttct tcgactccct

20

<210> 116

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 116

cttcttcgac tccctggtga

20

<210> 117

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 117

gactccctgg tgacacaagc

20

<210> 118

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 118

tggagccggc ttgcccggtg

20

<210> 119

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 119

tgcccggttg tg gatctggg

20

<210> 120

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 120

gttgctggat ctgggaccaa

20

<210> 121

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 121

accaacggag gtagtcttgt

20

<210> 122

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 122

ggaattgaac caagtttgta

20

<210> 123

<211> 20

<212> DNA

<213> H. sapiens

&lt;220&gt;

&lt;400&gt; 123

attgaaccaa gtttgtataa

20

&lt;210&gt; 124

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 124

gaaccaagtt tgtataaagg

20

&lt;210&gt; 125

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 125

ccaagtttgt ataaaggaga

20

&lt;210&gt; 126

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 126

attaaggaag agtgg tacta

20

<210> 127

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 127

actaccagat agaaattctg

20

<210> 128

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 128

tgaaattgga aattggaggc

20

<210> 129

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 129

attggaggcc aaagccttaa

20

<210> 130

<211> 20

<212> DNA

<213> H. sapiens

<220>

&lt;400&gt; 130

ctggactgca gagagtataa

20

&lt;210&gt; 131

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 131

gactgcagag agtataacgc

20

&lt;210&gt; 132

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 132

tgcagagagt ataacgcaga

20

&lt;210&gt; 133

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 133

gagagtataa cgcagacaag

20

&lt;210&gt; 134

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 134

agtataacgc agacaaggcc

20

<210> 135

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 135

gtggacagtg gcaccacgct

20

<210> 136

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 136

agtggcacca cgctgctgcg

20

<210> 137

<211> 20

<212> DNA

<213> H. sapiens

<220>



&lt;400&gt; 137

ctctgatggt ttctggactg

20

&lt;210&gt; 138

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 138

cagctggcgt gctggacgaa

20

&lt;210&gt; 139

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 139

attcggaac accttggctt

20

&lt;210&gt; 140

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 140

cctgagagac gagaactcca

20

&lt;210&gt; 141

&lt;211&gt; 20

<212> DNA

<213> H. sapiens

<220>

<400> 141

ccgtatcaca atcctgcctc

20

<210> 142

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 142

tacattcagc ccatgatggg

20

<210> 143

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 143

catgatgggg gccggcctga

20

<210> 144

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 144

tccacaaatg cgctggtgat

20

<210> 145

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 145

tggagggcctt ctacgtcatc

20

<210> 146

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 146

attgcgggtg ctgcagtgtc

20

<210> 147

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 147

gggtgctgca gtgtctgaaa

20

<210> 148

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 148

tgcaagtgtct gaaatttccg

20

<210> 149

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 149

tgaaatttcc gggcctttct

20

<210> 150

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 150

ttctcaacag aggatgtagc

20

<210> 151

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 151

gaggatgtag ccagcaactg

20

<210> 152

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 152

ttgtggattg tgcctatgc

20

<210> 153

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 153

tgtcctatgc gtcctatgagc

20

<210> 154

<211> 20

<212> DNA

<213> H. sapiens

<220>

<400> 154

ggagccatcc tccttgtctt

20

<210> 155

<211> 20

<212> DNA

<213> H. sapiens

&lt;220&gt;

&lt;400&gt; 155

tgtcttaatc gtcctgctgc

20

&lt;210&gt; 156

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 156

ccgtgaccct gaggtcgtca

20

&lt;210&gt; 157

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 157

aatgatgagt cctctctggt

20

&lt;210&gt; 158

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; H. sapiens

&lt;220&gt;

&lt;400&gt; 158

gtcagacatc gctggaaatg

20